

MSFC Safety *Bulletin*

Curing Oven Fire Lessons Learned

What Happened?

While curing a tooling mandrel, a fire occurred in the Building 4707 Despatch Oven. After the mandrel was broken up by the Redstone Arsenal Fire Department and removed to a foam dumpster located in the rear of Building 4707, the fire, which was believed to be out, reignited in the dumpster.

What Caused the Incident?

- Exothermic reaction(s) of an epoxy tooling paste and/or a highly insulating phenolic foam material sold under the trade name Thermo-Cor™.
- Thermo-Cor™, which caught fire, bore similarities to Spray on Foam Insulation (SOFI) that had previously caught fire during spray application.



What Lessons Can We Learn?

- Operations involving a potential exothermic reaction surrounded by highly insulating material are a high fire risk.
- Equipment which can be used for a variety of operations involving many types of materials poses unique challenges. A safety assessment should be performed prior to the start of each unique operation.